

# Dynamic Query Forms for Non-Relational Database

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**Abstract—** With quick advancement of investigative databases and web data databases are turning out to be exceptionally colossal in size and complex in nature. These databases hold extensive and heterogeneous information, with huge number of relations and qualities. So it is exceptionally hard to outline an arrangement of static inquiry structures to answer different specially appointed database inquiries on these cutting edge databases. Along these lines there is need of such framework which create Query Forms powerfully as indicated by the clients need at run time. The proposed framework Dynamic Query Form i.e. DQF framework going to give an answer by the inquiry interface in extensive and complex databases. In proposed framework, the center idea is to catch client intrigues all through client associations and to adjust the inquiry sort iteratively. Each cycle comprises of 2 sorts of client collaborations: Query Form Enrichment and Query Execution. In Query Form Enrichment DQF would prescribe a positioned rundown of question structure part to client so he/she can choose sought structure segments into current inquiry structure. In Query Execution client fills current inquiry shape and submit question, DQF going to show result and take input from client on gave question results. A client would have office to fill the inquiry frame and submit questions to see the inquiry result at every cycle. So that a question structure could be progressively refined till the client fulfills with the inquiry results.

**Keywords—** Database, Query Form, Query Execution, User Interaction.

## I. INTRODUCTION

A database is just as practical as question interface permits it to be. On the off chance that a client is not fit to the database what he or she wants from it, even the wealthiest information store gives petite or no quality. Composing very much organized questions, in dialects, for example, SQL and XQuery, can be trying because of various reasons, including the clients absence of commonality with the inquiry dialect and the clients lack of awareness of the fundamental

composition. A structure based inquiry interface, which just requires filling spaces to recognize question parameters, is valuable since it makes information clients with no learning of authority inquiry dialects or the database composition. By and by, structure based interfaces are utilized much of the time, yet generally every structure is composed in an ad-hoc way and its relevance is confined to a little arrangement of settled questions. Question structure is one of the greater part utilized client interfaces for questioning databases. With the quick advancement of web data and exploratory databases, cutting edge databases turn out to be vast and complex. Dynamic inquiry sort framework: DQF, an inquiry interface that is prepared to do powerfully creating question shapes for clients. Not quite the same as old report recovery, clients in data recovery zone unit normally willing to perform a few rounds of activities (i.e., refinement question conditions) before particular the last hopefuls. The pith of DQF is to catch client intrigues all through client associations and to adjust the inquiry sort iteratively. Each cycle comprises of 2 sorts of client cooperations: it contains just a couple of essential properties of the data. The vital inquiry sort is then improved iteratively by means of the collaborations between the client and system's framework till the client is fulfill with the inquiry results. Objective of this paper is to demonstrate that the benefits of utilizing element question frames for database over the current static inquiry shapes. It gives a solution for previously stated methodologies [3], [8] is proposed in. It consequently creates a great deal of question structures ahead of time. The client inputs a few catchphrases to discover significant inquiry shapes from countless produced question frames yet it is not fitting when the client does not have solid watchwords to depict the inquiries. Conventional inquiry structures are outlined and percharacterized by engineers or DBA in different data administration frameworks. With the fast improvement of web data and logical databases, present day databases turn out to be substantial and complex. In this manner, it is hard to outline an arrangement of static question structures to fulfill

different specially appointed database inquiries on those mind boggling databases.

## II. SYSTEM MODEL

In this system, first user will fill the query form and this query will be executed by the system and the result is displayed on the screen. Next, the user provide feedback whether the user is satisfied with the query form and if he is not satisfied then there is a option of generating the dynamic query form and ranking is done. At last the user can search the form according to the rank given to the dynamic query form.

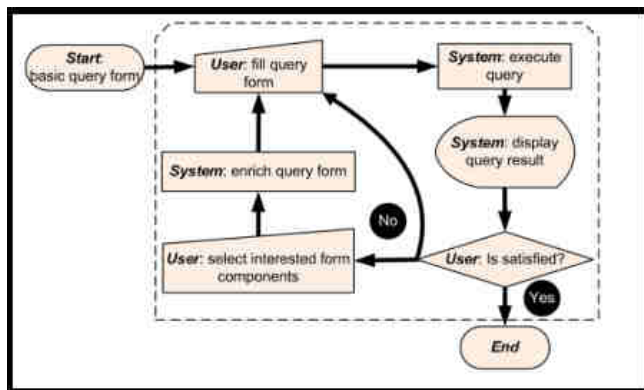


Fig.2.1: System Architecture

## III. PREVIOUS WORK

In this section author should discuss about related research has been done in the same domain or related domains with the name of the researcher and should be mentioned in the references.

## IV. PROPOSED METHODOLOGY

Registration activity: User have to registered before using the system of dynamic query form. In registration user have to enter their first and last name, mobile number, email address and password. And then confirm it for registration.

The screenshot shows a web browser window with the title "New User Registration". The page content includes a form with the following fields: First Name, Last Name, Email, Mobile phone, Create a password, and Confirm your password. There is a "Sign me up!" button at the bottom of the form.

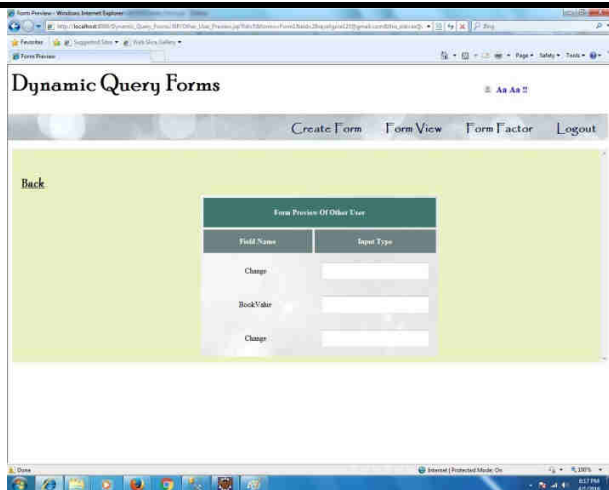
User LogIn: User need to login before generating new form. After login user ca generate his/her own form or can use the already existing form of other user and modify it for the future use.

The screenshot shows a web browser window with the title "Dynamic Query Forms". The page content includes a login form with fields for Username and Password, and a "SIGN IN" button. There is also a "Forgot Password" link.

User Form Generation: User can generate the dynamic for using the the component and respective name of that component. User can design the form according to their satisfaction. User can also use the existing form of other user and can also modify them for their future use.

The screenshot shows a web browser window with the title "Dynamic Query Forms". The page content includes a table with columns: Form Name, Created By, Form Name, and PScore. The table lists several forms created by "Sajal Gore". There is also a "Create Form" button and a "Form View" button.

Dynamic Data Entry Form: Develops an adaptive form system for data entry, which can be changed dynamically according to the previous data input by user[11]. Our work is different because the system is dealing with database query forms instead of data entry forms. Active Feature Probing[8] developed the active featuring probing technique for generating clarification questions to supply appropriate recommendations to users in database search. Different from their work which concentrates on searching the appropriate questions to ask the user, DQF aims to select query components.



## V. SIMULATION/EXPERIMENTAL RESULTS

Dynamic query form on non-relational database provides wide range of accessibility to the user. At each iteration queries are ranked precisely and provide required result to the user. We compare existing ranking methods with dqf: the baseline method ranks projection and selection attributes in ascending order of their schema distance to the current query form. For the query condition, it chooses the most frequent used condition in the training set for that attribute. Comparative graph is shown with respect to running time vs number of data instances of query result.

TABLE 1 : RESULT TABLE

NO OF DATA INSTANCES OF QUERY	EXISTING SYSTEM RUNNING TIME ON RELATIONAL DATA	EXISTING SYSTEM RUNNING TIME ON NON-RELATIONAL DATA USING DQF
500	60	80
600	68	85
700	77	91
800	85	95
900	92	99

## VI. CONCLUSION

His paper proposes a dynamic question structure era approach which helps clients powerfully produce inquiry shapes. The key thought is to utilize a probabilistic model to rank structure parts in light of client inclinations. The system catch client inclination utilizing both authentic inquiries and runtime criticism, for example, navigate. Test results demonstrate that the dynamic approach frequently prompts higher success rate and less difficult question frames contrasted and a static methodology. The positioning of structure segments additionally makes it less demanding for clients to modify question frames. As future work,

concentration will be on how the system methodology can be stretched out to non social information.

## VII. FUTURE SCOPES

Dynamic query forms for databases are well suited where the user is not satisfied with the user interface of the form.as a future work, multiple method to capture users interest for queries beside click feedback can be developed more complex queries can be embedded in the current system which can satisfied users requirement. Complex queries like aggregation and order by can be implemented in addition to insert and display. Dynamic query form for non-relational databases, as non-relational database are flexible than relational database, it will be a appropriate option to generate dynamic form using non- relational database. Converting relational database to nosql if this application is connected to another application having relational database can also be considered as a future work.

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